



**National Children's Center**  
for Rural and Agricultural Health and Safety

## **ANNUAL REPORT**

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## SECTION I: Center Overview

### Center's Summary

The National Children's Center for Rural and Agricultural Health and Safety was established in 1997 and has a long history of developing, testing and sustaining projects associated with children who live on, work on, and visit farms and ranches across the U.S. Unlike the regional NIOSH Agricultural Centers, this Center has a national focus with a national network of partners and project collaborators. The Center's major emphasis is on national leadership and knowledge mobilization (research to practice).

### Relevance

Injury data collected by NIOSH at six intervals from 1998 – 2012 revealed demographic and injury event details as well as trends over time. The rate of childhood agricultural injuries per 1,000 farms (includes youth who live on, visit, and are hired to work on farms) declined by 61% since the national Childhood Agricultural Injury Prevention Initiative was launched. Although overall rates are declining, farm injuries among children under 10 years are increasing, and the majority of injuries occur to non-working children. At the same time, it is estimated that the number of childhood agricultural deaths have remained constant at about 105 each year.

The Center's work continues to be highly relevant. The primary topics addressed by our Center are matched to the most common agricultural hazards. Scientific evidence has revealed the relative effectiveness of various interventions, as well as knowledge gaps - especially pertaining to behavior modification of responsible adults. Several of our Center's initiatives have evolved into enduring programs and we continue to enhance these endeavors and expand their reach through public and private sector partners. Most notably, the Center remains the hub for safety guidelines associated with youth working on family farms, youth employed for agricultural work, children playing on farms, safe agritourism operations, and media/journalist relations. Additionally, the Center is the home base for public awareness campaigns to Keep Kids Away from Tractors and operate ATVs safely. Furthermore, the Center has been responsive to the needs of vulnerable populations including migrant/immigrant/seasonal workers with language limitations, Anabaptists, African Americans, native Americans and Hmong populations.

### Key Personnel:

Name	Role	Phone	Email
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## **SECTION II: Highlights of Projects with High Impact**

### **Leadership and Partnerships**

Staff of the National Children's Center for Rural and Agricultural Health and Safety (NCCRAHS) are invited to participate on national-level initiatives addressing children/agriculture/health/safety. During 2014, these included the "Safe Agricultural Youth" USDA-funded initiative led by Penn State, the "National Tractor Safety Coalition" led by the New York Agricultural Research (North East) Center, the Grain Handling Safety Coalition based in Illinois, and the "Increasing Involvement of Youth in Agriculture" project of AGree, Washington, DC.

### **Operationalizing the Blueprint for Protecting Children in Agriculture: 2012 National Action Plan**

**Project Description:** The Blueprint for Protecting Children in Agriculture: 2012 National Action Plan was originally released in April of 2012 and several strategies were undertaken to widely disseminate the plan and help launch new initiatives based upon the plan's recommendations. Many strategies were integrated into the 2013 North American Agricultural Safety Summit, hosted by the Agricultural Safety and Health Council of America (ASHCA) with support from NIOSH.

#### **Outputs and Impact:**

- The 2012 National Action Plan has been widely distributed and serves as the basis for funding new initiatives by NIOSH, USDA and private foundations.
- The 2013 Ag Safety Summit, with 250 attendees and 33 partner organizations was successful in achieving its desired outcomes, including a solid representation of child-related issues.
- A dedicated issue of *Journal of Agromedicine* from the 2013 Ag Safety Summit was released in August 2014 with 13 child-related abstracts and several full manuscripts.
- A project to develop a Model Policy for Youth Employment in Agriculture was undertaken and completed, including a full publication in *Journal of Agromedicine, Vol 19, No. 3*.
- A study of the attributes of the RCMA child care program, serving migrant farmworkers in Florida, was completed and published its results in *Journal of Agromedicine, Vol 19, No.2*.
- The 2012 Action Plan will be featured at a forthcoming National Youth Farm and Ranch Symposium in Louisville, KY in October 2014.

### **Stakeholder Communication**

**Project Description:** Our Center serves as a media communications link with agricultural print, radio and television reporters. Press releases inform the public of updated statistics on child ag injuries as well as new resources for injury prevention. Individuals and organizations across all 50 states interact with NCCRAHS staff, seeking consultation for educational resources, programs and referrals. Newsletters and social media posts provide frequent points of contact with public and professional audiences. Topics of keen interest include: safety for agritourism operations, safe play areas on farms, work guidelines for family farm youth and guidance for employers of hired teen workers.

**Outputs and Impact:**

Notable impacts (in addition to presentations, publications) with various stakeholders included:

- Representatives of the Rural Mutual Insurance Companies are working with NCCRAHS staff to develop a safety program for youth working, playing and visiting farms, using various NCCRAHS resources.
- The Press Release on declining childhood agricultural injury rates was picked up by Associated Press and reported in several general and agricultural outlets.

**Childhood Agricultural Safety Network**

**Project Description:** For 15 years our Center has coordinated efforts of the Childhood Agricultural Safety Network (CASN), a coalition of organizations associated with youth, agriculture, safety and health. CASN members communicate with each other about timely issues, e.g. changes in child labor in agriculture regulations, and oftentimes collaborate with each other on education and outreach endeavors.

**Outputs and Impact:** One in-person meeting and three teleconferences enabled CASN members to unite in their efforts to safeguard children on farms.

CASN accomplishments included:

- Distributed more than 6,000 calendars (Year 2014) with child safety messages.
- Increased membership to over 40 organizations.
- Assisted with dissemination of information on the aftermath of the proposed/withdrawn child labor laws
- Shared and posted news clippings of child ag injuries and deaths
- Re-launched the “Keep Kids Away from Tractors” (KKAT) campaign with widespread media coverage and requests for campaign materials.
- Gave presentations at the Association of Equipment Manufacturers Risk Managers’ meeting and John Deere Conference on the “KKAT” campaign.
- Evaluations:
  - External evaluators conducted mail and phone interviews that revealed:
    - a) CASN is an effective network, with members identifying improved knowledge, shared resources and enhanced opportunities to network and disseminate information and resources; b) strengths include a strong and stable membership base of long-time members, new members indicating growth and vitality, and frequent communication; c) members strongly agreed that CASN fulfills an essential and national leadership role in childhood agricultural safety; and d) submitted findings for publication in peer-reviewed journal.
  - A mail survey of calendar distributor organizations revealed: a) calendars are widely disseminated; b) content is high quality and contains usable information; c) messages are adaptable for additional purposes; and d) calendars have a positive impact with a modest cost.

**Model Policy for Youth Employment in Agriculture**

**Project Description:** The work environment on farms and ranches can be dangerous. Special protections need to be in place to protect youth, including proper job assignment, training, adequate supervision and safety education. The “*Model Policy: Youth Employment in Agriculture*” was developed in collaboration with the National

Council of Agricultural Employers to promote best practices regarding youth employment, the work environment, voluntary guidelines for youth, and resources specifically for youth aged 14-17 years. The policy can be used “as is” or modified for agricultural company purposes.

**Outputs and Impact:**

- Publication: Miller ME and Lee BC (2014). Developing a model policy on youth employment in agriculture. *Journal of Agromedicine*. 19:3, 249-257.
- Model Policy: Miller ME, Salzwedel MA and Lee BC (2014). Model Policy: Youth Employment in Agriculture. National Children’s Center for Rural and Agricultural Safety and Health. Marshfield, WI., accessible from [http://www3.marshfieldclinic.org/nccrahs/?page=nccrahs\\_projects-products-model-policy](http://www3.marshfieldclinic.org/nccrahs/?page=nccrahs_projects-products-model-policy)
- A press release regarding the model policy was published in several agricultural trade journals.
- The Canadian Agricultural Safety Association adapted the Model Policy and distributed it (English and French versions).
- Presentations regarding the process and outcome were given at APHA and ISASH.

**Updated Tractor (NAGCAT) Guidelines**

**Project Description:** It has been more than a decade since the *North American Guidelines for Children’s Agricultural Tasks* (NAGCAT) were released to assist parents in assigning developmentally appropriate and safe farm work to their children ages 7-16 years. Since NAGCAT were released, a growing body of scientific evidence has accumulated related to the content and application of these work guidelines. The purpose of this project was to update the NAGCAT tractor guidelines based on review of the scientific literature and the recommendations of a core group of scientists to the NAGCAT project.

**Outputs and Impact:** The key consensus recommendation was dropping the youngest age group (12-13 years) from the NAGCAT tractor matrix, thus making 14-15 years the recommended ages to begin tractor operations.

- 22 NAGCAT tractor guidelines were updated based on scientific evidence.
- A companion piece for parents outlining 5 child development domains and their relationship to safe tractor operations (print and video) was developed.
- Cultivate Safety Website was designed for parents, prominently featuring the updated tractor guidelines and the child development companion pieces (<http://cultivatesafety.org>).

**Child Care: Protecting Children While Migrant Parents Work**

**Project Description:** This project was designed to identify the components of a successful child care model and disseminate information on how to develop feasible child care and community programs to protect children in agricultural settings while parents work.

**Outputs and Impact:**

- A strong partnership between National Council of Agricultural Employers, National Migrant and Seasonal Head Start, MCN and NCCRAHS has developed to move this project forward as a national model.
- Presentations on the *“Model” Family Services for Migrant and Seasonal Farm Workers* have been given to agricultural groups.
- A video depicting the model is posted on-line as a Best Practice.
- Publication: Liebman AK, Mainster B and Lee BC (2014). Family Services for Migrant and Seasonal Farm Workers: The Redlands Christian Migrant Association (RCMA) Model. *Journal of Agromedicine*. 19:2, 123-129.
- Proposal for expanding this project is funded in the next cycle of NCCRAHS.

**Mini-Grant Program (Evaluation)**

**Project Description:** The National Children’s Center for Rural and Agricultural Health and Safety’s Mini-Grant program supports small-scale projects that address prevention of childhood agricultural disease and injury. Because project outcomes and impact often occur months – and even years – after the final report is completed, an effort was made to gather more information through a survey of mini-grant recipients from 2009 through 2013.

**Outputs and Impact by the Recipients of Mini-grants:**

- More than 140 professional presentations and 7 publications
- 16 products/resources developed and distributed.
- PIs indicated that their funded projects: a) increased the reach of their organization’s activities; b) facilitated new partnerships; c) Increased organization’s focus on youth; d) increased personal knowledge/expertise; and e) many grants had results/products/programs that are still being used.

**Child Death Review**

**Project Description:** The National Children’s Center partnered with the National Center for the Review and Prevention of Child Deaths (NCRPCD) to refine the review and case reporting system for childhood agricultural injury deaths. The goal was to support and improve the childhood agricultural injury data collection process and data quality in order to better address causation, gaps in knowledge, and development of prevention strategies.

**Outputs and Impact:**

- Forged a new partnership with NCRPCD whom we had not worked with previously.
- Developed a Guide to Effective Review of Farm-Related Deaths to be used by Child Death Review Teams across the U.S.
- Developed a chapter in the NCRPCD web-based curriculum on farm-related deaths to be used for training Child Death Review Teams across the U.S.

## **Agritourism Safety and Health**

**Project Description:** *Agritourism Health and Safety Guidelines for Children* were developed by the National Children's Center for Rural and Agricultural Health and Safety (NCCRAHS) to provide farm owners the information and resources necessary to reduce the risk of illness and injuries to children visiting farms. Information is available on a variety of different topics and activities, including guideline information, checklists and ready-to-print resources. Materials are accessible through the "*Integrating Safety into Agritourism*" website ([www.safeagritourism.com](http://www.safeagritourism.com)).

### **Outputs and Impact:**

- Endorsement of our Center's print and website resources was granted by the leading national agritourism association - North American Farmers' Direct Marketing Association (NAFDMA).
- NCCRAHS agritourism safety resources were entered into evidence that assisted with passage of a Wisconsin Agritourism Liability Law.
- Invited presentation for the National Association of Mutual Insurance Companies (NAMIC) conference.
- Presentations were given for NAFDMA and several state agritourism associations.

## **Community Gardens: Safety and Health**

**Project Description:** Community, urban and school gardens are increasing in numbers and size, emphasizing the need to ensure the health and safety of the youth working in these gardens. This project assessed the activities, exposures and injury experiences of children in these types of gardens. Current NCCRAHS resources were reviewed to identify resources that could be used to fill the "safety gap" identified in this review. A customized resource is under development to fill this need.

### **Outputs and Impact:**

- Presentation on "Youth Safety in Gardening" at the National Women in Agriculture Association in Atlanta Georgia, April 2014; with a comment from Dr. Tammy Gray-Steel, Executive Director: "*The safety piece is what we have been missing. We look forward to working with you to add that to our activities.*"
- Survey identified range of youth activities in gardens (e.g. rototilling), which may necessitate the development of additional work guidelines and/or need to update current NAGCAT guidelines.
- *Safety Guidelines for Youth Working in Gardens* booklet is under development.
- NCCRAHS is receiving requests from gardening organizations across the country for youth safety materials when available.